



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,368	06/22/2001	Nobuo Hamamoto	500.30310CX2	7005

20457 7590 09/18/2002

ANTONELLI TERRY STOUT AND KRAUS  
SUITE 1800  
1300 NORTH SEVENTEENTH STREET  
ARLINGTON, VA 22209

EXAMINER

THANGAVELU, KANDASAMY

ART UNIT	PAPER NUMBER
----------	--------------

2123

DATE MAILED: 09/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/886,368

**Applicant(s)**

HAMAMOTO ET AL.

**Examiner**

Kandasamy Thangavelu

**Art Unit**

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 46-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 46-54 is/are rejected.
- 7) ☒ Claim(s) 55-60 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Introduction***

1. This communication is in response to the Applicants' Amendment mailed on July 1, 2002. Claims 46-60 are pending.

### ***Response to Arguments***

2. Applicants' arguments filed July 1, 2002 have been fully considered.

In response to Applicants' arguments with respect to Double patenting rejections, the reasons why any person of ordinary skill in the art would conclude that the inventions defined in Claims 46-54 of the application are obvious variations of the inventions defined in the claims in the U.S. patent 6,282,611 are provided.

In response to Applicants' arguments with respect to the rejections under 35 U.S.C. 103 (a), the rejections are withdrawn.

In view of the Double patenting rejections, this office action is made final.

### ***Foreign Priority***

3. Acknowledgment is made of the receipt of certified copies of English language translations of Applicants' foreign priority application 02-181402 dated July 11, 1990,

Art Unit: 2123

application 02-208072 dated August 8, 1990, application 03-057972 dated February 27, 1991 and application 03-057930 dated February 28, 1991 filed in Japan.

4. Acknowledgment is made of the receipt of certified copies of English language translations of the Foreign Patent Office Actions filed with the Information Disclosure Statement filed on 28 January 2002.

### ***Drawings***

5. The drawings submitted on June 22, 2001 for Figures 1-69 are accepted.

### ***Claim Objections***

6. The following is a quotation of 37 C.F.R § 1.75 (d)(1):

The claim or claims must conform to the invention as set forth in the remainder of the specification and terms and phrases in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

7. Claims 55-60 are objected to because of the following informalities:

Claim 55, Line 1, "playback circuit remotely connected" is incorrect; it should be "playback circuit removably connected".

Claim 55, Line 3, "independently for said digital source" is incorrect; it should be "independently of said digital source".

Claim 59, Lines 3-4, "to rapid recharge" is incorrect.

Claims objected to but not specifically addressed are objected to based on their dependency to an objected claim.

Appropriate corrections are required.

### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claim 46 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 1 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 46, teaches a *memory apparatus* having a playback function removably connected with a digital signal source to store digital data received from said digital signal source and to reproduce the digital data stored therein independently of said digital signal source, comprising:

a built-in memory circuit formed of a semiconductor memory for storing digital data received with addresses of said digital data from said digital signal source; and a built-in playback circuit, including a digital-to-analog converter, a filter circuit and an audio amplifier, for reproducing digital data stored in said memory circuit.

This memory apparatus of Claim 46 is same as the *memory card* comprised in the digital information system of Claim 1 of '611.

Claim 46 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 46 in a digital information system,

such as recited in Claim 1 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

10. Claim 47 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 3 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 47 teaches that digital data is transmitted by *communication means*. The communication means of Claim 47 is same as the *communication channel* specified in Claim 3 of '611.

Claim 47 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 47 in a digital information system, such as recited in Claim 3 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

Claim 47, does not expressly teach that the digital signal source includes a digital supply circuit for supplying digital data and a terminal device for storing the digital data received from the digital signal supply circuit through a selected one of communication channel and a storage medium, the terminal device being connected through a connector to the memory card for receiving/delivery of digital data. However, the digital signal source needs to include a digital supply circuit for supplying digital data and a terminal device for storing the digital data received from the digital signal supply circuit through a selected one of communication channel and a storage medium for the claimed invention to operate. The terminal device needs to be connected through a connector to the memory card for receiving/delivery of digital data. The specification, Page 14, Lines 11-14 specifies that the terminal equipment is connected to an original supplier of a digital signal through a broadband integrated services network (BISDN) to receive the digital signal. The specification, Page 14, Lines 7-8 describes Fig. 1, which shows a block diagram of a terminal device of a digital signal selling system, which is the digital information system. Specification, Page 14, Lines 26-28 specifies that the terminal device is roughly comprised of an input section, a memory section and an output section. Specification, Page 17, Lines 1-6 describes Fig. 3, which shows a block diagram of the memory section in the terminal device. The memory section includes an external memory like a hard disk memory, a RAM as a buffer memory and a ROM for storing various programs. Specification, Page 4, Line 28 to Page 5, Line 2 specifies receiving a specified digital signal by a connection through a connector with the memory card. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide a digital signal supply circuit for supplying the digital data, provide a terminal device for storing the digital data received from the digital signal supply



circuit, use the communication means of Claim 47 in between the digital signal supply circuit and the terminal device, provide storage medium in the terminal device and connect the terminal device through a connector to the memory card, as recited in Claim 3 of the '611 patent, because the digital signal supply circuit is required to supply digital data, a terminal device is required for receiving the digital data from the digital signal supply circuit, a communication channel is required to communicate between the digital signal supply circuit and the terminal device, a storage medium is required to store the digital signal received and a connector is required between the terminal device and the memory card for transferring the digital data from the terminal device to the memory circuit in the memory card.

11. Claim 48 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 13 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 48 teaches that the built-in playback circuit of Claim 46 has playback conditions which are automatically designated in accordance with the contents of an identification (ID) code. The built-in playback circuit of Claim 48 is same as the built-in playback circuit specified in Claim 13 of '611.

Claim 48 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored

in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 48 in a digital information system, such as recited in Claim 13 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

Claim 48 does not expressly teach that the memory card has a rechargeable battery built therein, the rechargeable battery being charged by a power supply in the digital signal source, when the memory card is connected to the digital signal source. Claim 48 does not also expressly teach that the playback circuit allows for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal. Specification Page 21, Line 26 through Page 22, Line 4 specifies that a power supply supplies power from the terminal device to the player. Where a rechargeable battery is used as a power supply of the player, a digital signal is transferred when the player is connected to the terminal device. At the same time, the secondary battery is charged rapidly by the power supply. Page 33 Line 23 to Page 34, Line 2 specifies that the power supplied from the terminal device is used for rapid battery charging operation when the batteries are mounted inside the player. Page 35, Line 12 specifies that this substantially lengthens the battery life. Specification, Page 27, Lines 9-10, specifies reading digital signal stored in the memory circuit. Specification, Page 27, Line 21 to

Page 28, Line 1 specifies the digital filter circuit inputting the band component to the digital-to-analog converter and the digital-to-analog converter outputting analog signals.

It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide a rechargeable battery built in the player, the rechargeable battery being charged by a power supply in the digital signal source, when the memory card is connected to the digital signal source such as recited in Claim 10 of the '611 patent, because the rechargeable battery will increase the life of the battery in the player and recharging it with the power from the digital signal source is a convenient way as the player is connected to the digital signal source often to download the digital data. It would also have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide in the playback circuit of the player for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal such as recited in Claim 11 of the '611 patent because the digital audio data is stored in the memory and the audio equipments need analog audio signals.

12. Claim 49 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 12 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 49 teaches that the memory apparatus is a card-like storage medium. The memory apparatus of Claim 49 is same as the memory card specified in Claim 12 of '611, which is one of a separable and removable thin card-like storage medium..

Claim 49 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A

Art Unit: 2123

digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 49 in a digital information system, such as recited in Claim 12 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

Claim 49 does not expressly teach that the memory card has a rechargeable battery built therein, the rechargeable battery being charged by a power supply in the digital signal source, when the memory card is connected to the digital signal source. Claim 49 does not also expressly teach that the playback circuit allows for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal. Specification Page 21, Line 26 through Page 22, Line 4 specifies that a power supply supplies power from the terminal device to the player. Where a rechargeable battery is used as a power supply of the player, a digital signal is transferred when the player is connected to the terminal device. At the same time, the secondary battery is charged rapidly by the power supply. Page 33 Line 23 to Page 34, Line 2 specifies that the power supplied from the terminal device is used for rapid battery charging operation when the batteries are mounted inside the player. Page 35, Line 12

specifies that this substantially lengthens the battery life. Specification, Page 27, Lines 9-10, specifies reading digital signal stored in the memory circuit. Specification, Page 27, Line 21 to Page 28, Line 1 specifies the digital filter circuit inputting the band component to the digital-to-analog converter and the digital-to-analog converter outputting analog signals.

It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide a rechargeable battery built in the player, the rechargeable battery being charged by a power supply in the digital signal source, when the memory card is connected to the digital signal source such as recited in Claim 10 of the '611 patent, because the rechargeable battery will increase the life of the battery in the player and recharging it with the power from the digital signal source is a convenient way as the player is connected to the digital signal source often to download the digital data. It would also have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide in the playback circuit of the player for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal such as recited in Claim 11 of the '611 patent, because the digital audio data is stored in the memory and the audio equipments need analog audio signals.

13. Claim 50 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 14 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 50 teaches that the playback circuit has playback conditions which include stereo or monaural playback, a resolution of 8 and 16 bits, and a sampling frequency. The playback circuit of Claim 50 is same as the playback circuit specified in Claim 14 of '611 which has

Art Unit: 2123

playback conditions which include stereo or monaural playback, a resolution of 8 and 16 bits, and a sampling frequency.

Claim 50 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 50 in a digital information system, such as recited in Claim 14 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

Claim 50 does not expressly teach that the memory card has a rechargeable battery built therein, the rechargeable battery being charged by a power supply in the digital signal source, when the memory card is connected to the digital signal source. Claim 50 does not also expressly teach that the playback circuit allows for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal. Specification Page 21, Line 26 through Page 22, Line 4 specifies that a power supply supplies power from the terminal device to the player. Where a rechargeable battery is used as a power supply of the

Art Unit: 2123

player, a digital signal is transferred when the player is connected to the terminal device. At the same time, the secondary battery is charged rapidly by the power supply. Page 33 Line 23 to Page 34, Line 2 specifies that the power supplied from the terminal device is used for rapid battery charging operation when the batteries are mounted inside the player. Page 35, Line 12 specifies that this substantially lengthens the battery life. Specification, Page 27, Lines 9-10, specifies reading digital signal stored in the memory circuit. Specification, Page 27, Line 21 to Page 28, Line 1 specifies the digital filter circuit inputting the band component to the digital-to-analog converter and the digital-to-analog converter outputting analog signals.

It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide a rechargeable battery built in the player, the rechargeable battery being charged by a power supply in the digital signal source, when the memory card is connected to the digital signal source such as recited in Claim 10 of the '611 patent, because the rechargeable battery will increase the life of the battery in the player and recharging it with the power from the digital signal source is a convenient way as the player is connected to the digital signal source often to download the digital data. It would also have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide in the playback circuit of the player for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal such as recited in Claim 11 of the '611 patent, because the digital audio data is stored in the memory and the audio equipments need analog audio signals.

Art Unit: 2123

14. Claim 51 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 10 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 51 teaches a *memory apparatus* having a playback function removably connected with a digital signal source to store digital data received from said digital signal source and to reproduce the digital data stored therein independently of said digital signal source, comprising:

a built-in memory circuit formed of a semiconductor memory for storing digital data received with addresses of said digital data from said digital signal source; a built-in playback circuit, including a digital-to-analog converter, a filter circuit and an audio amplifier, for reproducing digital data stored in said memory circuit; and

a rechargeable battery capable of being charged by a power supply in said digital signal source when said memory card is connected with said digital signal source.

The memory apparatus of Claim 50 is same as the memory card specified in Claim 10 of '611.

Claim 51 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a



playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 51 in a digital information system, such as recited in Claim 1 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

15. Claim 52 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 13 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 52 teaches that the built-in playback circuit of Claim 51 has playback conditions which are automatically designated in accordance with the contents of an identification (ID) code. The built-in playback circuit of Claim 52 is same as the built-in playback circuit specified in Claim 13 of '611.

Claim 52 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of

Art Unit: 2123

Applicants' invention to use the memory apparatus of Claim 52 in a digital information system, such as recited in Claim 13 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

Claim 52 does not also expressly teach that the playback circuit allows for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal. Specification, Page 27, Lines 9-10, specifies reading digital signal stored in the memory circuit. Specification, Page 27, Line 21 to Page 28, Line 1 specifies the digital filter circuit inputting the band component to the digital-to-analog converter and the digital-to-analog converter outputting analog signals. It would also have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide in the playback circuit of the player for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal such as recited in Claim 11 of the '611 patent, because the digital audio data is stored in the memory and the audio equipments need analog audio signals.

16. Claim 53 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 12 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 53 teaches that the memory apparatus is a card-like storage medium. The memory apparatus of Claim 53 is same as the memory card specified in Claim 12 of '611, which is one of a separable and removable thin card-like storage medium..

Claim 53 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 53 in a digital information system, such as recited in Claim 12 of the '611 patent, comprising the digital signal source, because the memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

Claim 53 does not also expressly teach that the playback circuit allows for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal. Specification, Page 27, Lines 9-10, specifies reading digital signal stored in the memory circuit. Specification, Page 27, Line 21 to Page 28, Line 1 specifies the digital filter circuit inputting the band component to the digital-to-analog converter and the digital-to-analog converter outputting analog signals. It would also have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide in the playback circuit of the player for reading out a digital audio signal from the memory and for converting the digital audio signal

into an analog audio signal such as recited in Claim 11 of the '611 patent, because the digital audio data is stored in the memory and the audio equipments need analog audio signals.

17. Claim 54 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 14 of U.S. Patent No. 6,282,611. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 54 teaches that the playback circuit has playback conditions which include stereo or monaural playback, a resolution of 8 and 16 bits, and a sampling frequency. The playback circuit of Claim 54 is same as the playback circuit specified in Claim 14 of '611 which has playback conditions which include stereo or monaural playback, a resolution of 8 and 16 bits, and a sampling frequency.

Claim 54 does not expressly teach a digital information system comprising a digital signal source. However, such a system is necessary for the claimed invention to operate. A digital signal source is required to provide the digital signal to be received and stored in the memory card. The specification, Page 4, Lines 13-16, states that the memory card with a playback function is connected to a digital signal source so a digital signal is received and stored in the memory and then the stored digital signal can be reproduced in the player. The specification states, Page 4, Lines 20-24 states that in this digital information system, a digital signal is received from a digital signal source and delivered to a memory card which has a playback function. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the memory apparatus of Claim 54 in a digital information system, such as recited in Claim 14 of the '611 patent, comprising the digital signal source, because the

memory apparatus has to be connected to a digital signal source to receive and store the digital signal data in the memory, so the stored digital signal can be reproduced in the player.

Claim 54 does not also expressly teach that the playback circuit allows for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal. Specification, Page 27, Lines 9-10, specifies reading digital signal stored in the memory circuit. Specification, Page 27, Line 21 to Page 28, Line 1 specifies the digital filter circuit inputting the band component to the digital-to-analog converter and the digital-to-analog converter outputting analog signals. It would also have been obvious to one of ordinary skill in the art at the time of Applicants' invention to provide in the playback circuit of the player for reading out a digital audio signal from the memory and for converting the digital audio signal into an analog audio signal such as recited in Claim 11 of the '611 patent, because the digital audio data is stored in the memory and the audio equipments need analog audio signals.

### ***Applicant's Arguments***

18. The applicants argue the following:

(1) the teaching and the motivation to combine the features are not present in the applied art;

(2) Tarlow does not disclose any specific structure or the like as to which power source in the module and the center is used when and how the power sources are used; and

(3) none of the other references teach or suggest power supply switching as specified in the claims of this application, alone or in combination;

***Examiner's reply***

19. In response to the Applicants' arguments, the examiner has withdrawn the claim rejections under 35 USC 103 (a).

***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

The following patents are cited to further show the state of the art with respect to architectural design system that assists an architect in designing a building feature.

1. Momot et al., "Cassette/machine optically coupled interface", U.S. Patent 4,806,958, February 1989.

2. Lyhus, "Information collection and storage system with memory test circuit", U.S. Patent 4,271,512, June 1982.

3. Goddard, "Image storage and retrieval apparatus", U.S. Patent 4,994,922, February 1991.

***ACTION IS FINAL***

21. Applicant's arguments with respect to claim rejections under double patenting are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 703-305-0043. The examiner can normally be reached on Monday through Friday from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska, can be reached on (703) 305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7329.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

K. Thangavelu  
Art Unit 2123  
September 13, 2002

  
SAMUEL BRODA, ESQ.  
PATENT EXAMINER